

Abstract

A steel sheet with a thickness of at least 0.30 mm is made of an ultra-low carbon steel with a chemical composition including C: at most 0.010%, Si: at
5 most 0.5%, Mn: at most 1.5%, P: at most 0.12%, S: at most 0.030%, Ti: at most
0.10%, Al: at most 0.08%, and N: at most 0.0080%. The total number of non-
metallic inclusions observed under a microscope in sixty fields in a sample
prepared in accordance with JIS G0555 is at most 20. During manufacture of the
steel, the amount of FeO + MnO in slag in a ladle at the time of continuous
10 casting is controlled to at most 15%, and the throughput at the time of casting is
made at most 5 tons per minute. The steel sheet does not develop pin hole
defects or press cracks caused by inclusions when used for applications such as
motor housings or oil filter housings requiring severe press forming.

00000000-00000000